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[CLAIMS]

1. A method of correcting a signal representation of a radiation
5 image of an object comprising the steps of
 - storing a matrix of correction values in a memory device, said
correction values being obtained by read out of an image stored
by a radiation detector that has been subjected to a flat field
exposure,
 - 10 - exposing said radiation detector to a radiation image of an
object,
 - generating for each pixel of said radiation image of said object
a signal representation of the pixel value, characterised in that
 - immediately following generation of said signal representation of
15 a pixel value, the signal representation is applied to a
processing unit,
 - simultaneously a correction value pertaining to said pixel is
read from said memory and applied to said processing unit,
 - said signal representation is corrected by means of said
20 correction value in said processing unit.

2. An apparatus for generating a radiation image of an object
comprising
 - image acquisition means for detecting a radiation image of said
25 object by means of a radiation detector and for generating an
electric signal representation of pixel values of said radiation
image,
 - memory means for storing a matrix of correction values obtained
by read out of a radiation image stored by a radiation detector
30 that has been subjected to a flat field exposure,
 - a hard ware signal processing unit having a first and a second
input,
 - said first input being coupled to said image acquisition means
for consecutively receiving the electric signal representation
35 of individual pixel values of said radiation image of an object

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immediately following generation of said electric signal representation and

- said second input being coupled to said memory device for simultaneously receiving a corresponding correction value
5 retrieved from said memory device,
- said hard ware signal processing unit for correcting a pixel value received at said first input by means of a corresponding correction value simultaneously received at said second input.

10 3. An apparatus according to claim 2 wherein said signal processing unit is a digital signal processing unit and said first input is coupled to said image acquisition means via an analog-to-digital converter.

15 4. An apparatus according to claim 2 wherein said signal processing unit is an analog signal processing unit and said memory is coupled to said image acquisition means via a digital-to-analog converter.

5. An apparatus according to claim 2 wherein said image acquisition
20 means is arranged for double-sided reading of a radiation detector.

6. An apparatus according to claim 3 wherein said radiation detector is a photostimulable phosphor screen.

25 7. An apparatus according to claim 2 provided with a low pass filter for filtering said matrix of correction values.

8. An apparatus according to claim 2 wherein said matrix of
correction values has a lower number of pixels than the detected
30 radiation image and wherein identical correction values is applied to at least some different pixels.

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